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Conference Abstract

Advances in the Digitization and Mobilization of Natural History Collections in Guatemala

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Abstract

Since its development in 2020, the Guatemala Biodiversity Portal (Fig. 1), generated with Symbiota (Gries et al. 2014, Gilbert et al. 2020, Symbiota Support Hub 2021), has turned into an outstanding resource to facilitate the digitization, mobilization, and use of specimen data from local natural history collections (Orellana et al. 2023). More than 50,000 records and several thousands of images from Guatemalan zoological, botanical, mycological, and paleontological collections have been shared online for the first time in this portal. An integrated Symbiota installation allows further data mobilization to the Global Biodiversity Information Facility (GBIF.org 2024a), amplifying its impact on biodiversity research at an international level. To date, more than 42,000 records have been shared from the Guatemala Biodiversity Portal (GBIF.org 2024b), promoting visibility and recognition for

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national collections and researchers as shown by more than 300 citations in scientific literature, and the presence of at least 50 local collectors and taxonomists in the platform, Bionomia (Shorthouse 2020).

Portal de Biodiversidad de Guatemala
Portal de Biodiversidad de Guatemala
Digitalización y Manejo de Colecciones Biológicas
Contact Us
Iniciar Sesión
Inicio
Colecciones
Map Search
Listados de Especies
Imágenes
Data Use
Ayuda de Symbiota
Mapa de Sitio
Español
Bienvenidos al Portal de Biodiversidad de Guatemala
El portal ofrece una alternativa libre y gratuita para el manejo y digitalización de datos provenientes de colecciones biológicas, así como de observaciones de campo de entidades o investigadores dedicados al estudio de la biodiversidad. El portal, además, permite la generación de mapas, listados de especies y otros proyectos interactivos. La información ingresada en este portal también puede ser añadida a la Instalación Global de Información de Biodiversidad -GBIF-, desde donde puede alimentar a otros agregadores de información locales e internacionales. Los datos añadidos al portal están disponibles para ser utilizados por investigadores, estudiantes y público en general, pero se insta a citar adecuadamente el origen de los datos.
El portal está alojado en los servidores del Centro de Integración del Conocimiento de la Biodiversidad (BIOKIC) de la Universidad Estatal de Arizona (ASU), en Estados Unidos. Para más información o para gestionar un perfil por favor comunicarse con Samanta Orellana (sorellana@asu.edu) o Zabdi López (zabdi@alumni.uvg.edu.gt). Más información en nuestra página de documentación.
Búsqueda de especies
Búsqueda
OCULTAR SUBTÍTULO
Doryphora viridifasciata; ASUHIC0144921; G. Zhang; M.A. Jansen, M. Barrios 2014-06-07. Imagen por: Samanta Orellana. Cortesía de: Arizona State University Hasbrouck Insect Collection (ASU-ASUHIC).
UVG UNIVERSIDAD DEL VALLE DE GUATEMALA
USAC TRICENTENARIA
ASU Biodiversity Knowledge Integration Center

Figure 1.

Homepage of the Guatemala Biodiversity Portal. Available at: https://biodiversidad.gt.

Personalized training, documentation, and technical support have been key to the growing success of the portal (Orellana et al. 2022a, Portal de Biodiversidad de Guatemala 2023). Continuous leadership provided by portal managers and the Symbiota team has additionally amplified the active participation of the Guatemalan collections community. Engagement with undergraduate students has also been crucial to increasing the volume of specimen digitization. Outreach and crowdsourcing activities, as well as guided assignments and temporary internships in research projects, have contributed to transcribing most of the available data. Careful supervision by collection and portal managers, integrated data cleaning tools (Pearson 2021), and a curated taxonomic thesaurus (Orellana et al. 2022b) help maintain the accuracy of the digital records in the portal.

Furthermore, the improving accessibility to specimen data from Guatemalan collections and tailored resources in a bilingual Spanish-English interface (e.g., interactive checklists, Pearson and Walker 2021), have made the portal an important source of information, enabling local researchers to develop and share studies about the natural diversity of the country (Prado et al. 2023, Vásquez-Almazán 2023). Additional outcomes, strategies, and reflections about the dynamics of the community will be shared during the presentation.

Keywords

biodiversity platforms, specimen records, Symbiota, Latin America

Presenting author

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Conflicts of interest

The authors have declared that no competing interests exist.

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